

USSN: 09/666,928
Atty. Docket No.: 10188/2
Amdt. dated March 22, 2004
Reply to Office Action of January 21, 2004

REMARKS/ARGUMENTS

Applicants submit the attached Declaration of one of the inventors, Robert A. Migliorini, under 37 C.F.R. §1.132 to distinguish the films of the present invention from the cited prior art.

The Applicants respond to the rejections of the claims in the Office Action as follows:

Claim Rejections - 35 USC § 103

Claims 13, 14, 16-18 and 20 have been rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,691,043 to Keller et al. ("Keller" or "the '043 patent") in view of U.S. Patent 6,235,143 to Crighton et al. ("Crighton" or "the '143 patent") as evidenced by U.S. Patent 6,503,635 to Kong et al. ("Kong" or "the '635 patent"), "substantially as set forth in the Office Action mailed on 7/28/2003." Office Action, p.2.

The July 28, 2003 Office Action states at page 2 that, "Keller discloses the core layer comprising polypropylene homopolymer and 4 to 8 wt% PBT as a cavitating agent column 4, line 48, column 7, lines 17-18." However, Keller also discloses that the polypropylene homopolymer must be "sufficiently atactic" (col. 4, line 49) and that when an isotactic polypropylene is used, modifiers must be added to reduce the isotacticity (col. 4, lines 52-56). The Applicants respectfully submit that the "sufficiently atactic" polypropylene used in the core layer of Keller's films is substantially different from the "polypropylene homopolymer of high stereo-regularity" (Claims 13 and 17) used in the core layer of the Applicants' films.

The Abstract of the Keller patent makes it clear that the core layer of Keller's film does not contain "polypropylene homopolymer of high stereo-regularity" and describes the film disclosed in the '043 Keller patent as:

A uniaxially heat-shrinkable, biaxially oriented, multilayer film having a polypropylene-containing core layer...The core layer contains isotactic polypropylene and a modifier which reduces the crystallinity of the polypropylene by increasing chain imperfections or reducing isotacticity of the polypropylene-containing core.

USSN: 09/666,928

Atty. Docket No.: 10188/2

Amdt. dated March 22, 2004

Reply to Office Action of January 21, 2004

As explained in detail in the supporting Migliorini Declaration, the modifiers used by Keller reduce the isotacticity of the propylene so that it can be highly oriented in order to provide a high shrinkage film. However, Keller's modified isotactic polypropylene when used in the core layer of the film of the present invention would not produce a film that would be satisfactory for its intended purpose. Keller's core layer with its low isotactic polypropylene could not be used in the Applicants' films because its use would result in a film with reduced tensile properties and stiffness and poorer hot tack and hot slip properties. Such films would be unsuitable for the intended packaging applications. See Migliorini Declaration, ¶¶ 7, 15 and 16.

The films of the present invention are intended to be used to package products such as frozen novelties, including ice cream bars and ice cream sandwiches. See specification, p. 1, lines 13-14. A combination of the Keller, Crighton and Kong references would produce a high shrink film that would not be suitable for the intended uses disclosed by the Applicants. The Migliorini Declaration explains that high shrinkage films, such as the one produced by a combination of the cited references, are not suitable for use on packaging machines designed for a low shrink film. If the low isotactic polypropylene taught by Keller were substituted for the high isotactic polypropylene required by the Applicants, the films of the present invention would be unacceptable for their intended use. The Migliorini Declaration states the problems that would be caused and concludes that high shrinkage films containing low isotactic polypropylene would prevent the packaging machines from operating efficiently. See Migliorini Declaration, ¶ 16.

In the Office Action mailed on February 24, 2003, the Examiner stated at pages 9-10 that:

Applicants need to provide evidence or declaration to demonstrate that the high stereo-regularity of a cavitated core layer of the present invention makes it patentable over the prior art such as high degree of the crystallinity of the core layer which is opposite to the teaching of Keller, i.e., a core layer containing a modifier to reduce the crystallinity of the polypropylene (abstract).

USSN: 09/666,928

Atty. Docket No.: 10188/2

Amdt. dated March 22, 2004

Reply to Office Action of January 21, 2004

The accompanying Migliorini Declaration provides evidence that the films of the present invention require core layers of isotactic propylene with high stereo-regularity in order to produce low shrink packaging films that are suitable for the intended packaging applications. The polypropylenes of low stereo-regularity that are used in the core layers of the Keller films have properties and processing characteristics that make them suitable for use in high shrinkage films. Such high shrinkage films are made to be flexible so that they easily conform to and take the shape of the products being packaged. However, these same properties and processing characteristics make these polypropylenes unsuitable for use in films which are designed to have higher tensile properties and greater stiffness. The films of the present invention are intended to be fairly stiff so that they can be used for such applications as packaging frozen novelties, including ice cream bars and ice cream sandwiches. If the Keller polypropylene core layer was used in the films of the present invention, the ice cream bars would look like they were wrapped in plastic wrap. This would not be acceptable to the manufacturers of ice cream products who are the intended purchasers of the films of the present invention. See Migliorini Declaration, ¶¶ 9 and 14. Accordingly, the films of the present invention are patentable over the Keller patent.

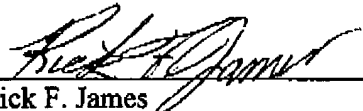
Claims 15 and 19 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Keller and Crighton in combination with Kong and U.S. Patent 5,681,208 to Shreck. Both of these rejections rely on Keller for the polypropylene core layer and, as discussed above, the low isotactic polypropylene used in the high shrinkage films taught by Keller are significantly different from the high isotactic, low shrink films of the present invention. Accordingly, claims 15 and 19 are not obvious in view of the cited references and Applicants respectfully request that the rejections be withdrawn.

USSN: 09/666,928
Atty. Docket No.: 10188/2
Amdt. dated March 22, 2004
Reply to Office Action of January 21, 2004

Applicants respectfully submit that the Migliorini Declaration and the arguments made herein, have overcome the rejections under 35 U.S.C. 103. The Applicants, therefore, respectfully request that the rejections of the claims be withdrawn. If resolution of any remaining issue is required prior to allowance of the application, it is respectfully requested that the Examiner contact Applicants' undersigned attorney at the telephone number provided below.

Respectfully submitted,

Date: March 22, 2004


Rick F. James
Registration No. 48,772

Post Office Address (to which correspondence is to be sent)
ExxonMobil Chemical Company
Law Technology
P.O. Box 2149
Baytown, Texas 77522-2149
Telephone No. (281) 834-2438
Facsimile No. (281) 834-2495